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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,090	07/29/2003	William R. Wheat	31223/00011	6383

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EXAMINER

NAKARANI, DHIRAJLAL S

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,090

Applicant(s)

WHEAT ET AL.

Examiner

D. S. Nakarani

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 22-40 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Peiffer et al. (U.S. patent 5,573,717) in view of Shiga et al (U.S. Patent 4,355,144), Reid (U.S. Patent 4,692,380) and McAlpin et al (U.S. patent 5,468,440) for the reasons of record set forth in paragraph 2 of the Office Action mailed May 11, 2004: In addition Peiffer et al disclose addition of low molecular hydrocarbon resin compatible with the polymer in an amount of 1 to 30 wt% for improving the water vapor permeability and for improving the film stiffness. Peiffer et al's low -molecular hydrocarbon resin compatible with the polymer includes petroleum resins, styrene resins, terpene resins etc (col. 9 lines 9-47).
3. Applicant's arguments filed March 14, 2005 have been fully considered but they are not persuasive. In reference to rejection of claims 22-40 under 35 USC § 103 (a) as being unpatentable over Peiffer et. al (U.S. Patent 5,573,717) in view of Shiga et al (U.S. Patent 4,355,144), Reid (U.S. Patent 4,692,380) and McAlpin et al (U.S. patent 5,468,440), Applicants mainly argue that the amorphous polymer disclosed by Peiffer et al are not processing modifiers as called for in present claims, but instead are polymeric solids which function as void or void initiators in the void layer of Peiffer et al. The amorphous polymers of Peiffer et al are incorporated into the polymer as granules or as granulated concentrates in order to form the voids in the voided layer. Applicants state that since Peiffer et. al's amorphous polymers are

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distributed as particles in the basic polymer layer they clearly could not function as processing modifiers to improve the processability of the isotactic propylene-ethylene copolymer. Further applicants state that Peiffer et al fail to disclose an isotactic propylene/ethylene copolymer containing no more than 1 wt % ethylene. Shiga et al do not disclose an isotactic propylene-ethylene copolymer. Shiga et al's polymer assuming that it is not amorphous, does not lead to conclusions that the Shiga et al's polymer is an isotactic propylene-ethylene copolymer. Various other polymer configurations such as syndiotactic, homi-isotactic and even stereo block polymers are a possibility. There is nothing in Shiga et al to provide motivation to combine Shiga et al with Peiffer et al. The patent to McAlpin et al has nothing in common with Peiffer et al. McAlpin contains no disclosure relative to a processing modifier of any kind. Peiffer et al's voided layer is employed to impact the optical properties of the film such as to provide a translucent or opaque appearance. Therefore one of ordinary skill in the art would not be motivated to combine Reid's teaching to metalize the opaque film of Peiffer et al.

These arguments are unpersuasive because Peiffer et al's amorphous resin is in particulate form in the final product but Peiffer et al clearly blended amorphous resin with the olefin polymer under polymer liquefying conditions. Peiffer et al disclose that the amorphous polymer and the olefin polymer are blended under polymer liquefying conditions so that initially no particulate amorphous phase is discernible (col. 3 lines 64-66 and col. 5, lines 12-15). Further Peiffer et al also disclose addition of 1 to 30 wt% compatible low molecular hydrocarbon resin for improving vapor permeability and for improving the film stiffness (col. 9, lines 9-47). There is nothing on record showing that Peiffer et al's amorphous resin and low-molecular hydrocarbon resins do not act as process modifier. Applicants have not provided any evidence showing that

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Peiffer et al's amorphous resin and low molecular hydrocarbon resins are different than the processing modifier used in the present application. Peiffer et al disclose random ethylene - propylene copolymer having ethylene content from 1 to 10 wt%. Thus 1.0 wt% ethylene content meets applicants "no more than 1.0 wt% ethylene content. Shiga et al clearly suggest that the amorphous propylene resin has low commercial value and also suggest that propylene copolymer's stretchability decreases with the increase in the ethylene content. Further Shiga et al state that propylene copolymer having at least 1.5 wt % ethylene content improves its heat sealability but film has very poor mechanical properties. Shiga et al solves that problem by polymerizing 0.1 to 1.0 wt% ethylene in ethylene-propylene copolymer using specific type of titanium trichloride. Shiga et al's propylene copolymer has improved stretchability without sacrificing Young's modulus and other mechanical properties. There is nothing on record showing that Shiga et al's propylene copolymer is a syndiotactic or homi-tactic copolymer and not an isotactic propylene copolymer.

McAlpin et al's propylene copolymer show comparable shear modulus and heat distortion temperature values to conventional polymers but fabrication of article is achieved at much lower temperature than the conventional propylene polymer. Therefore, it is obvious to use McAlpin et al's propylene copolymer to replace conventional propylene copolymer to reduce energy cost.

Reid discloses metalizing propylene film for either functional or aesthetic reasons. Reid does not disclose that propylene film made opaque by metalizing Reid only suggest changing aesthetic appearance. Therefore it would have been obvious to a person of ordinary skill in the

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art to metalize any propylene film opaque and/or transparent to change appearance for aesthetic reasons.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. S. Nakarani whose telephone number is (571) 272-1512. The examiner can normally be reached on Tuesday-Friday from 7:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. S. Nakarani/af
June 7, 2005


D. S. NAKARANI
PRIMARY EXAMINER